

CLAIMS:

1. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein said radiating fins are formed by flattening said radiating fins to bring flattened loops of said coiled radiating fins of metal wire into close contact with one another and securing the flattened side edge portions of said radiating fins onto said radiating substrate by soldering.

2. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein slit-like insertion grooves are formed in said radiating substrate and said radiating fins are formed by flattening said radiating fins to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another and inserting the flattened side edge portions of said radiating fins into said insertion grooves in said radiating substrate to be secured onto said radiating substrate by soldering.

3. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein said radiating fins are formed by flattening said radiating fins and said radiating fins having side edge portions adhered to said radiating substrate with a heat conductive adhesive while being in contact with said radiating substrate.

4. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that slit-like insertion grooves are formed in said radiating substrate and said radiating fins are formed by flattening said radiating fins to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another and inserting the flattened side edge portions of said radiating fins into said insertion grooves in said radiating substrate to be secured onto said radiating substrate by the adhesive.

5. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that slit-like insertion grooves are formed in said radiating substrate and said radiating fins are formed by flattening said radiating fins so as to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another, inserting the flattened side edge portions of said

radiating fins into said insertion grooves in said radiating substrate, and securing said radiating fins onto said radiating substrate by deforming said insertion grooves under pressure.

6. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that slit-like insertion grooves are formed in said radiating substrate and said radiating fins are formed by flattening said radiating fins to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another, inserting the flattened side edge portions of said radiating fins into said insertion grooves in said radiating substrate, and securing said radiating fins onto said radiating substrate by deforming said insertion grooves under vibrational pressure.

7. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that said radiating fins are formed by flattening said radiating fins so as to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another and securing the flattened side edge portions of said radiating fins onto said radiating substrate by flash welding.

8. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that slit-like insertion grooves are formed in said radiating substrate and said radiating fins are formed by flattening said radiating fins to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another and inserting the flattened side edge portions of said radiating fins into said insertion grooves in said radiating substrate to be secured onto said radiating substrate by flash welding.

9. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that said radiating fins are formed by flattening said radiating fins to bring flattened loops of the coiled radiating fins of metal wire into close contact with one another and securing the flattened side edge portions of said radiating fins onto said radiating substrate by vibrational welding.

10. A method for manufacturing a heat sink having radiating fins formed by winding a metal wire into a coil and secured on radiating substrate, wherein that slit-like insertion grooves are formed in said radiating substrate and said radiating fins are formed by flattening said radiating fins to bring flattened loops of the coiled radiating fins of metal wire

into close contact with one another and inserting the flattened side edge portions of said radiating fins into said insertion grooves in said radiating substrate to be secured onto said radiating substrate by vibrational welding.

11. The method for manufacturing a heat sink according to any of claims 1, 3, 7 and 9, wherein only the side edge portions of said radiating fins to touch said radiating substrate are flattened.

11. The method for manufacturing a heat sink according to any of claims 2, 4, 5, 6, 8 and 10, wherein only the side edge portions of said radiating fins to be fitted into said insertion grooves in said radiating substrate are flattened.